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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,133

04/16/2004

Rick S. Hall

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10/07/2005

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EXAMINER

WRIGHT, INGRID D

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/825,133	HALL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ingrid Wright	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-15, 18-20, 22-26, 28, 30-32 and 36-40 is/are rejected.
- 7) ☒ Claim(s) 11, 16, 17, 21, 27, 29 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/19/04</u>   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,13,14,26,30,31,39,40 are rejected under 35 U.S.C. 102(b) as being anticipated by Gallivan (US 20030103324 A1).

With respect to claim 1, Gallivan teaches (Fig. 2) a monitor assembly for a computer having a base (210), the monitor assembly comprising: a lid (208) attached to the base 210) a screen (202) assembly slidably attached to the lid (208,) and an actuating mechanism (204) coupled between the screen assembly (202) and the lid (208) connected to slide the screen (202) assembly between a lowered position and a raised position.

With respect to claim 2, Gallivan teaches (Fig. 2) a screen (202), a frame (202b), and a thin backing made from a lightweight, high-strength material.

With respect to claim 3, Gallivan teaches (Fig. 1-3) a base (210), a lid (208) pivotally coupled to the base (210), a screen assembly (202) slidably

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attached to the lid (208) and an actuating mechanism coupled between the screen assembly (2082) and the lid (208) connected to slide the screen assembly between a lowered position and a raised position.

With respect to claim 3, Gallivan teaches (Fig. 3a, 3b) T rails (208a,208b) in addition to guides, grooves, tracks, slots, rails may be provided within screen (202) and the lid (208) comprises T slots (not shown) that interface with opposing features of support unit (208) (col.2, par. 0020 & col. 2, par 0026).

With respect to claim 4, Gallivan teaches (Fig. 2) the lid (208) comprises T-rails (208a,208b) and the screen assembly comprises (202) which slidably receive the T-rails (208a,208b).

With respect to claim 5, Gallivan teaches flanges (226) on lateral edges thereof for slidably receiving the screen assembly (202).

With respect to claim 13 &14, Gallivan shows an alternate embodiment in Fig. 4 where the actuating mechanism 408 includes a pair of members 410a-b pivotally mounted to lid 404, pin portions 416 project from each member into transversely extending slots (see , Fig. 4, slots unlabeled). Mechanism 414 pivots members 410a-b relative to the lid.

With respect to claim 26, the lifter gears of Gallivan rotate with a circular static cutout of the screen with respect to the shape of the lifter gear, in so far as cam-shaped has any clear meaning, the cross-sectional shape of the lifter gear of Gallivan would be cam shaped.

With respect to claim 30, Gallivan teaches (Fig. 2) a stabilizing component (410a) mounted on a rear lateral aspect of the base (406).

With respect to claim 31, Gallivan teaches (Fig. 2) the stabilizing components comprise vertical hinges and a locking mechanism that (226) that allow user to lock or unlock the screen (202) at certain heights, but does not specifically disclose the locking mechanism of the hinges at 90 degrees relative to the base.

With respect to claim 39, Gallivan teaches (Fig. 2) a base (210), a lid ((208) pivotally coupled to the base (210), a screen assembly (202) slidably attached to the lid (208) and an actuating mechanism (204) coupled between the screen assembly (202) and the lid (208) connected to slide the screen assembly (202) between a lowered position and a raised position.

With respect to claim 40, Gallivan teaches (Fig. 2) a computer (100) having a base (210), the monitor assembly comprising: a lid (208) attached to the

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base (210), a screen assembly (202) slidably attached to the lid (208), and means for sliding the screen assembly (202) between a lowered position and a raised position.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9,10,12,15,18,19,20,22,23,24,25,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallivan (US 2003/0103324 A1) in view of Mizoguchi et al. (US 6381125 B1).

With respect to claim 6, Gallivan teaches an electric motor (not shown) may be included and arranged in height adjusting mechanism (204), screen (202), support unit (208), and/or base unit (210) (col. 2, 0023).

Gallivan does not show the electric motor.

Mizoguchi et al. teaches (Fig. 8) the actuating mechanism comprising a motor (73M) attached to the lid (72), the motor having a drive shaft (73B) and worm gear 74N.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the automated height adjustment of Gallivan to operate via drive shaft and worm gear allowing for controlled, even movement of the display. .

With respect to claim 7, Mizoguchi et al. teaches (Fig. 4) the screw portion of drive shaft 73B acts as a lifter gear and operatively coupled to worm gear 74N is rotationally attached to the lid (2).

It would have been obvious to one of ordinary skill in the art for the gearing of Mizoguchi et al. to operatively slide the pin 416 of Gallivan within the slot as a means to automate the movement of Gallivan.

With respect to claim 8, Mizoguchi et al. fails to teach the addition of a meshing gear between the worm gear & lifter gears. It would have been obvious to one of ordinary skill in the art to add additional gears for the conventional and known purpose of further distributing the load on the gear and to allow for more precise movement.

With respect to claim 9, providing the members 410a-b of Gallivan with worm & lifter gears as taught by Mizoguchi as applied above would inherently require left & right hand helixes on opposite sides of the display in order to both

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operate in the same direction simultaneously w.r.t. claim 10—same as for claim 8.

With respect to claim 12, the relative thickness of the gears compared to that of the monitor assembly would be determined based upon routine experimentation by one of ordinary skill in the art to come up with the lightest weight while still maintaining strength and integrity.

With respect to claim 15, Gallivan fails to teach the members & mechanism comprising lift gears & worm gears respectively.

Mizoguchi et al. teaches lifter gear 73B and worm gear 74N.

It would have been obvious to one of ordinary skill in the art to allow for the automated height adjustment of Gallivan to operate via lift & worm gears allowing a controlled, even movement of the display.

With respect to claim 18, the worm gear of Mizoguchi et al. would inherently prevent movement members & mechanism comprising lifter & worm gear respectively.

Mizoguchi et al. teaches lifter gear 73B and worm gear 74N.



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It would have been obvious to one of ordinary skill in the art to allow for the automated height adjustment of Gallivan to operate via lifter & worm gears allowing a controlled, even movement of the display.

With respect to claim 19, Gallivan teaches a user interface (not shown) that may include a switch (up/down) arranged in one of the units of the portable computer (200) (col. 2, par 0023).

With respect to claim 20, Mizoguchi et al. teaches (Fig. 8) the motor (73M) and drive shaft (73B) are located below the screen assembly.

With respect to claim 22, the actuating mechanism 410a-b of Gallivan as modified by the worm & lifter gears of Mizoguchi et al. above would include two gears (one on each side) driven by a right angle drive unless operated by a motor.

With respect to claim 23, the right angle drive of Mizoguchi et al. would inherently be helical in order for the display to move up and down.

With respect to claim 24, Mizoguchi et al. teaches the lifter gears (3b), but is silent as to the lifter gears by eccentric cams.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize other alternate means of actuating mechanisms to provide rotational motion of the height adjustment mechanism.

With respect to claim 25, Gallivan teaches a motor (col. 2, par. 0023) is a brushless motor.

With respect to claim 28, Gallivan teaches a height locking feature that a user can lock or unlock the screen (202) at certain heights (col. 2, par 0023), but does not specifically disclose an eccentric cam mechanism attached to the lid to selectively disengage the motor and worm gears from a locked position with the meshing gears.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the height locking feature with the eccentric cam mechanism to disengage the motor and worm gears with the meshing gears as an alternate means of unlocking the display screen at certain heights.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32,36,37,38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallivan (US 2003/0103324 A1 in view of Drewery et al. (US 2003/00111581 A1).

With respect to claim 32, Gallivan teaches a screen assembly, except a holding member.

Drewery et al. teaches (Fig. 4,6,9) a document holder comprising a compartment (18,20,22) attached to a top of the screen assembly (16), and a holding member (2) comprising means of holding a document, the holding member (2) movable between an extended position wherein the holding member (2) can hold the document, and a retracted position wherein the holding member (2) is housed within the compartment.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the holding member as taught by Drewery et al. in

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the invention of Gallivan, in order to provide a means to read or view a peripheral document while viewing the display screen.

With respect to claim 36, Drewery et al. teaches (Fig. 4,6,9) a rail (8) for maintaining the holding member (2) into the extended position.

With respect to claim 37, Drewery et al. teaches (Fig. 4,6,9) the compartment (18,22,22) is defined in a housing, the housing being selectively detachable from the screen assembly (2).

With respect to claim 38, Gallivan teaches a screen assembly moveable via an actuating mechanism, except a holding member.

Drewery et al. teaches a document holder (2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the holding member as taught by Drewery et al. in the invention of Gallivan, in order to provide a means to read or view a peripheral document while viewing the display screen.

***Allowable Subject Matter***

5. Claim 11,16,17,27,29,33,34,35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 11,16,17,27,29,33,34,35 the claim 11 recites: "meshing gear has a plurality of holes therein for reducing a weight of the monitor assembly," claim 26 recites: "actuating mechanism comprises at least one cam-shaped lifter member that rotates within a cam-shaped or circular static cut-out within the screen assembly," claim 33 recites: "a second rectangular member slidably and pivotally coupled to a middle portion of the first rectangular member at a first end and a J shaped shelf foldable attached to a second end of the second rectangular member," and claim 35 recites: "first rectangular member comprises a vertically oriented hinge." The aforementioned limitations in combination with all remaining limitations of claim 11,26,33,34,35 are believed to render the claim and all claims dependent therefrom patentable over the art of record.

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***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Helot et al. 6556435 B1, Wang et al. US 20030142064 A1 & Nakasuna US 6711003 B2 show the state of the art regarding height adjustment mechanism for displays in computer configurations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571) 272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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